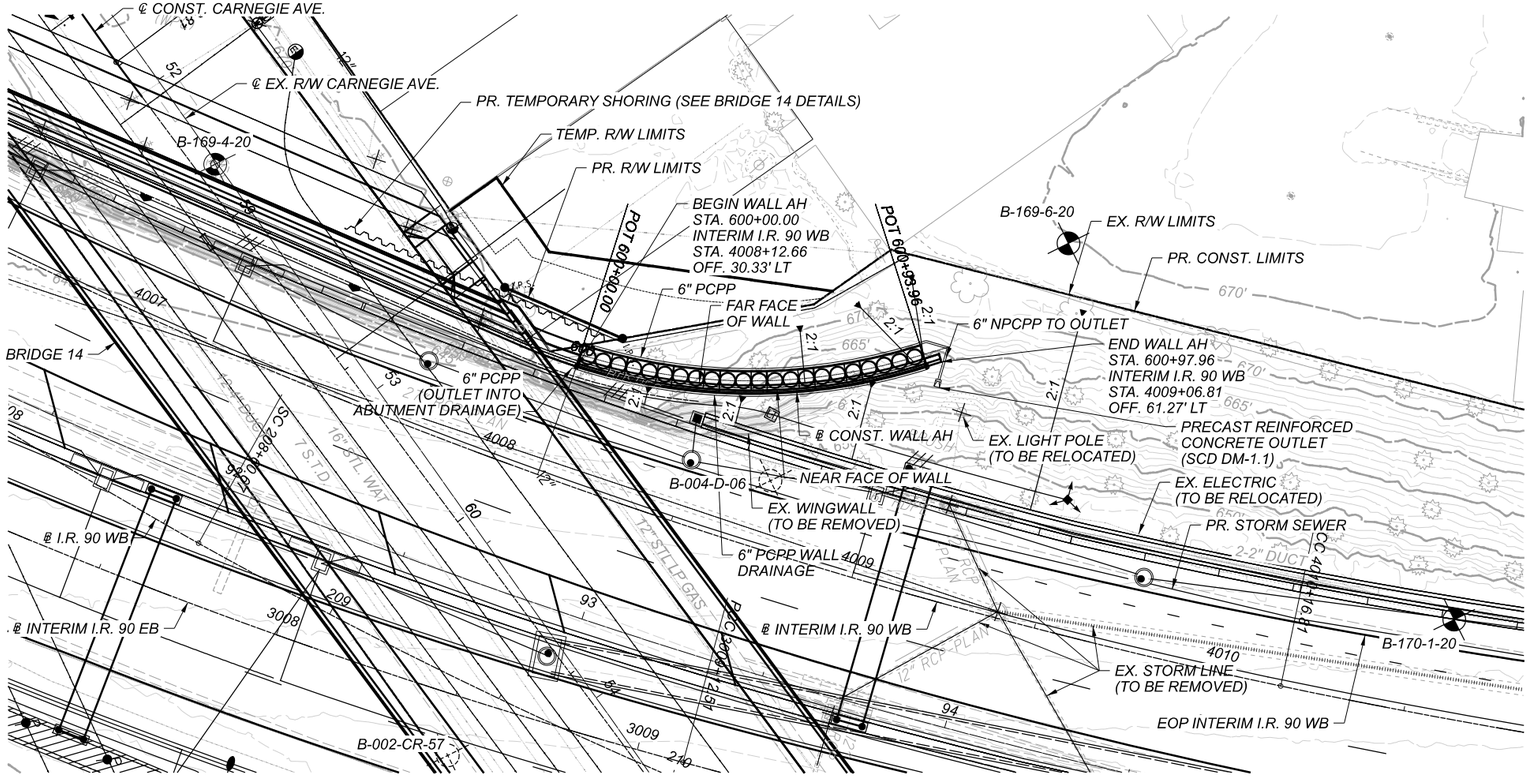
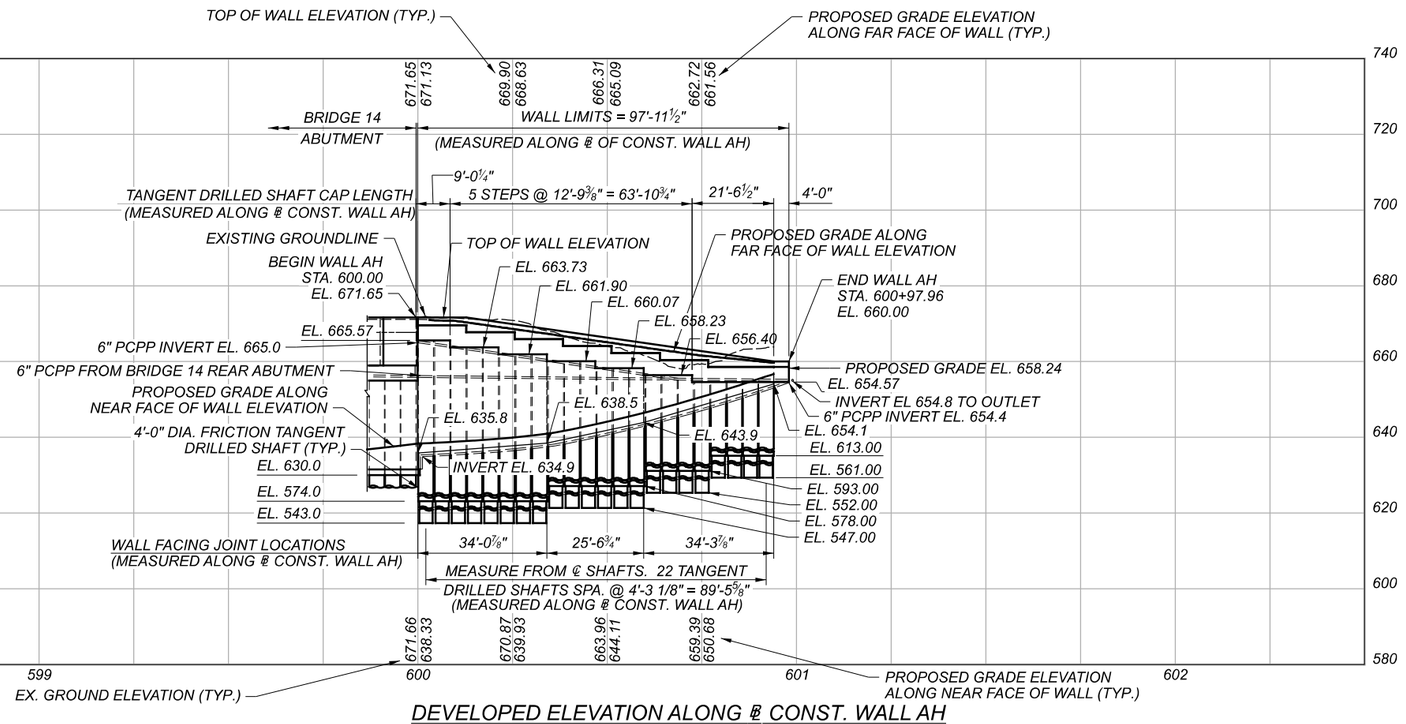


PLAN



DEVELOPED ELEVATION ALONG ℄ CONST. WALL AH

℄ CONST. WALL AH
CURVE DATA
P.I. = Sta. 600+48.51
Δ = 35°06'34" LT
Dc = 37°22'01"
R = 153.33'
T = 48.51'
L = 93.96'
E = 7.49'

BENCHMARK DATA

BM #62 STA.	41+38.42,	ELEV.	672.11,	OFFSET	75.42 LT.,	RR SPIKE
BM #64 STA.	58+35.86,	ELEV.	671.25,	OFFSET	47.90 LT.,	RR SPIKE
BM #65 STA.	66+35.73,	ELEV.	668.92,	OFFSET	38.62 RT.,	RR SPIKE
BM #73 STA.	49+25.90,	ELEV.	671.90,	OFFSET	31.86 LT.,	CUT CROSS

BENCHMARK STATION AND OFFSETS ARE FROM ℄ CONST. CARNEGIE AVE.

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN
SHEET 3 / 2338

BORING LOCATION*

BORING	STATION	OFFSET	TOP OF ROCK EL.
B-169-4-20	4007+01.36	44.10 LT.	-
B-169-6-20	4009+32.04	100.50 LT.	-
B-170-1-20	4010+58.71	26.09 LT.	-
B-004-D-06	4008+71.78	18.21 LT.	-
B-002-CR-57	4008+15.34	77.79 RT.	-

* = BORING STATION AND OFFSETS ARE FROM ℄ INTERIM I.R. 90 WB

PROPOSED WORK

THE PROPOSED WORK CONSISTS OF CONSTRUCTING A RETAINING WALL ALONG THE RIGHT SIDE OF I.R. 90 WB. THE WALL IS TOP DOWN CONSTRUCTION CONSISTING OF TANGENT DRILLED SHAFTS WITH CAST-IN-PLACE CONCRETE FACING WITH A REINFORCED CONCRETE CAP AND FENCE WALL.

NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. FOR WALL CROSS SECTIONS, SEE SHEET 609 TO 610 / 2338
3. STATION AND WALL OFFSETS SHOWN AT FRONT FACE OF WALL.

LEGEND

- HISTORIC BORING LOCATIONS
- PROJECT BORING LOCATIONS
- INSTRUMENTED BORING LOCATION

CONST. = CONSTRUCTION
EOP = EDGE OF PAVEMENT
EOS = EDGE OF SHOULDER

WALL PLAN AND PROFILE
WALL AH
ALONG NORTH SIDE OF I.R. 90 UNDER CARNEGIE AVE.

SFN N/A
DESIGN AGENCY Michael Baker INTERNATIONAL
DESIGNER GZ | CHECKER SED
REVIEWER LPC 08-11-22
PROJECT ID 82382
SUBSET 1 | TOTAL 11
SHEET 1051 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: BL Wall AH-1 - AH Plan 1 PAPERSIZE: 17x11 (in.) DATE: 8/12/2022 TIME: 1:59:50 PM USER: Mbittner
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District12\82382\400-Engineering\Structures\WALL_AH\Sheets\82382_AH_WP001.dgn

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS:

VPF-1-90	REVISED	7/20/2018
DM-1.1	REVISED	7/17/2020

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800	DATED	1/21/2022

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS", 9TH EDITION, ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND THE ODOT BRIDGE DESIGN MANUAL, 2020 (DATED 07-16-21).

DESIGN DATA:

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI
(CONCRETE FACING, DRILLED SHAFT CAP & FENCE WALL)

CONCRETE CLASS QC5, WITH $\frac{3}{8}$ IN MAX. AGGREGATE SIZE:
COMPRESSIVE STRENGTH 4.5 KSI (DRILLED SHAFT)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

PERMANENT STEEL CASING - ASTM A252 GRADE 3 - MINIMUM YIELD STRESS 45 KSI

SEQUENCE OF CONSTRUCTION

CONSTRUCT WALL AH DURING MOT PHASE 4.

SEE MAINTENANCE OF TRAFFIC NOTES FOR ADDITIONAL PHASES AND INFORMATION

ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN, PERMANENT GRAFFITI PROTECTION

APPLY A PERMANENT GRAFFITI COATING QUALIFIED ACCORDING TO SUPPLEMENT 1083 THAT IS COMPATIBLE WITH THE CONCRETE SEALER OVER WHICH IT IS APPLIED. PROVIDE A COATING THAT MEETS THE REQUIREMENTS LISTED BELOW. APPLY THE GRAFFITI COATING IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.

A. THE MATERIAL SHALL BE A SINGLE COMPONENT, RTV (ROOM TEMPERATURE VULCANIZED), NEUTRAL MOISTURE CURE, PERMANENT (NON-SACRIFICIAL), TYPE III (WATER CLEANABLE) POLYSILOXANE (SILICONE) ANTI-GRAFFITI COATING, FREE OF ANY WAXES, EPOXIES, OR POLYURETHANE COMPONENTS.

B. THE COATING SHALL BE A ONE COAT SYSTEM (NO PRIMER) CAPABLE OF BEING SPRAY APPLIED TO A DRY FILM THICKNESS OF 15 MILS (375 MICRONS) WITHOUT RUNS OR SAGS (MULTIPLE COAT APPLICATION ACCEPTABLE FOR BRUSH/ROLLER USAGE AND PRIMER USAGE ACCEPTABLE FOR SPECIALTY SUBSTRATES SUCH AS GALVANIZED METAL).

C. THE COATING SHALL EMIT LESS THAN 300 G/L (2.5 POUNDS PER GALLON) OF VOLATILE ORGANIZE COMPOUNDS (EPA METHOD 24).

D. THE COATING SHALL MEET THE FOLLOWING PERFORMANCE REQUIREMENTS:
1. CLEANABILITY LEVEL 1 (GRAFFITI COMPLETELY REMOVED WITH COLD WATER POWER WASH) AS PER ASTM D7089 WITH LOW PRESSURE (1200 PSI) COLD WATER WASH AFTER 2000 HOURS ACCELERATED UV-CONDENSATION EXPOSURE IN ACCORDANCE WITH ASTM D4587.
2. GRAFFITI RESISTANCE LESS THAN 7.5 AS PER ASTM D6578 AFTER 2000 HOURS ACCELERATED UV-CONDENSATION EXPOSURE IN ACCORDANCE WITH ASTM 4578.
3. NO SIGNS OF GRAFFITI OR GRAFFITI STAINING AND MUST BE INTACT AND EXHIBIT NO SIGNS OF STREAKING, CRACKING, PINHOLING, DISCOLORING, OR OTHER VISIBLE COATING DEGRADATION UPON CASUAL OBSERVATION WHEN TESTED IN ACCORDANCE WITH TXDOT TEX 890-B, TYPE III METHOD.
4. BREATHABILITY OF 10 PERMS (+/- 3) PER ASTM D1653 USING "WET CUP METHOD".
5. ELONGATION AT BREAK GREATER THAN 100% AS PER ASTM D412 (USING DIE "D").
6. ADHESION RATING OF "8 - DIFFICULT TO REMOVE" AS PER ASTM D6677 (ADHESION BY KNIFE).

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN

APPLY SEALER TO ALL EXPOSED SURFACES INCLUDING THE CAST IN PLACE CONCRETE FACING. THE FINISH COAT COLOR SHALL BE AS REQUIRED BY THE LANDSCAPING PLANS. SEE LANDSCAPING PLANS FOR COLOR INFORMATION. THE ADDITIONAL MATERIAL AND LABOR REQUIRED TO SEAL THE FORM LINER RELIEF SHALL BE INCLUDED IN THIS ITEM. TO ACCOUNT FOR THE SURFACE VARIATIONS DUE TO THE FORM LINERS, AN EXTRA 20 PERCENT HAS BEEN ADDED TO THE SEALING QUANTITIES FOR THE PURPOSE OF ESTIMATING.

ITEM 518 - PREFABRICATED GEOCOMPOSITE DRAIN

THIS WORK CONSISTS OF FURNISHING AND PLACING PREFABRICATED GEOCOMPOSITE DRAIN (PGD) AGAINST THE CONCRETE WALL FACING.

FURNISH PGD CONSISTING OF A DRAINAGE CORE WITH A GEOTEXTILE FABRIC BONDED TO AT LEAST ONE SIDE. USE CORE MATERIAL THAT CONSISTS OF A STABLE, POLYMER PLASTIC MATERIAL WITH A CUSPATED OR GEONET STRUCTURE. THE CORE MATERIAL SHALL HAVE SUFFICIENT FLEXIBILITY TO WITHSTAND BENDING AND HANDLING DURING INSTALLATION WITHOUT DAMAGE. FURNISH GEOTEXTILE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS FORMED INTO A WOVEN OR NON-WOVEN FABRIC. FURNISH PGD CONFORMING TO THE FOLLOWING REQUIREMENTS. FURNISH MANUFACTURER'S CERTIFIED TEST DATA.

	PROPERTY	TEST METHOD	VALUE
CORE	THICKNESS	ASTM D 5199	0.4 INCH
	COMPRESSIVE STRENGTH	ASTM D 1621	13,650 PSF MIN.
	FLOW RATE	ASTM D 4716	9 TO 25 GPM/FT
FABRIC	APPARENT OPENING SIZE	ASTM D 4751	0.3 MM MAX.
	FLOW RATE	ASTM D 4491	40 GPM/SQ.FT. MIN.
	GRAB TENSILE STRENGTH	ASTM D 4632	90 LBS MIN.
	CBR PUNCTURE	ASTM D 6241	65 LBS MIN.

PLACE PGD BETWEEN THE TANGENT SHAFTS, INCLUDING THE CANTILEVER PORTION AT THE END OF THE WALL. PLACE THE SIDE FACED WITH GEOTEXTILE AGAINST THE TIMBER LAGGING, FACING TOWARDS THE RETAINED GROUND, AND SECURE THE PGD TO THE LAGGING. USE NAILS AND WASHERS AT LEAST 1-INCH DIAMETER IN SIZE TO SECURE THE PGD ALONG THE EDGES OF THE PGD AND AT A MAXIMUM SPACING OF 4 FEET.

SPLICE ABUTTING SECTIONS TOGETHER BY OVERLAPPING THE GEOTEXTILE FLAP (IF PROVIDED) ON ONE SECTION WITH THE ADJACENT SECTION OF PGD. OVERLAP THE GEOTEXTILE IN A SHINGLED OVERLAP SO THAT THE UPPER GEOTEXTILE IS ON TOP OF THE LOWER GEOTEXTILE. IF A GEOTEXTILE FLAP IS NOT PROVIDED, COVER THE SEAM WITH A 12-INCH WIDE STRIP OF GEOTEXTILE FABRIC CENTERED OVER THE SEAM AND SECURED IN PLACE USING 3-INCH WIDE WATERPROOF PLASTIC TAPE.

SEAL ALL EXPOSED EDGES OF THE CORE MATERIAL TO PREVENT SOIL INSTRUSION. SEAL EXPOSED EDGES BY FOLDING THE GEOTEXTILE FLAPS OVER AND AROUND THE PGD OR, IF A FLAP IS NOT PROVIDED, COVERING THE EXPOSED EDGE WITH A 12-INCH WIDE STRIP OF GEOTEXTILE FABRIC, TAPING THE STRIP TO THE PGD GEOTEXTILE 8 INCHES FROM THE EXPOSED EDGE, AND FOLDING THE REMAINING 4 INCHES OVER AND AROUND THE PGD. SECURE LOOSE EDGES OF THE GEOTEXTILE FABRIC WITH 3-INCH WIDE WATERPROOF PLASTIC TAPE.

REPAIR ANY DAMAGE TO THE GEOTEXTILE FABRIC BY COVERING WITH A PATCH WHICH OVERLAPS THE DAMAGED AREA AND EXTENDS AT LEAST 6 INCHES BEYOND THE EDGE OF THE DAMAGED AREA. TAPE THE EDGES OF THE PATCH IN PLACE USING 3-INCH WIDE WATERPROOF PLASTIC TAPE. IF THE CORE OF THE PGD IS DAMAGED, REPLACE IT WITH A NEW SECTION OF PGD AND SPLICE IT AS DESCRIBED ABOVE.

WHERE SHOWN ON THE PLANS, PLACE THE BOTTOM OF THE PGD ADJACENT TO A PERFORATED DRAINAGE COLLECTION PIPE AND POROUS BACKFILL AND COVER WITH GEOTEXTILE FABRIC. ENSURE A CONTINUOUS DRAINAGE PATH FROM THE PGD CORE TO THE PIPE. WHERE A WALL HAS WEEPHOLES FOR DRAINAGE, ENSURE WATER CAN DRAIN FROM THE PGD TO THE WEEPHOLE. IF NECESSARY, CUT A HOLE IN THE CORE TO ALLOW DRAINAGE OR USE A WEEPHOLE FITTING FROM THE PGD MANUFACTURER. DO NOT CUT GEOTEXTILE.

ITEM 524 - DRILLED SHAFTS, 42" DIAMETER, AS PER PLAN
ITEM 524 - DRILLED SHAFTS, 48" DIAMETER, AS PER PLAN

GENERAL:
THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT TO INSTALL DRILLED SHAFTS AS DETAILED IN THE PLANS IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT C&MS SECTION 524, AND WITH THE ADDITIONAL REQUIREMENTS DEFINED BELOW.

ANTICIPATED DRILLED SHAFT DEFLECTIONS:
TANGENT DRILLED SHAFTS ("SHAFT", "SHAFTS") ARE INCORPORATED AS WALLS IN VARIOUS STRUCTURAL ELEMENTS FOR THIS BRIDGE. AS DESIGNED AND DETAILED THE SHAFTS ARE EXPECTED TO DEFLECT UNDER THE APPLIED PERMANENT LOADS (DC, DW, EP, WA) AND TRANSIENT LOADS (LL, LS, TU) AT THE SERVICE LIMIT STATE. MEASURES FOR ACCOMODATING THESE DEFLECTIONS ARE DETAILED BELOW.

THE SHAFT HEAD IS CONSIDERED TO BE THE DESIGN BEAM SEAT ELEVATION FOR SHAFTS INCORPORATED IN ABUTMENTS. THE SHAFT HEAD IS CONSIDERED TO BE THE DESIGN TOP OF CAP ELEVATION FOR SHAFTS INCORPORATED IN RETAINING WALLS. IN BOTH CASES THE FINISHED TOP OF SHAFT IS LOWER THAN THE SHAFT HEAD ELEVATION.

THE ANTICIPATED DEFLECTION AT THE SHAFT HEAD ELEVATION RELATIVE TO THE SHAFT TIP ELEVATION DUE TO PERMANENT LOADS ARE AS FOLLOWS:

WALL AH 6.00 INCHES

DESIGN ASSUMPTIONS:
BEHAVIOR OF THE DRILLED SHAFTS AS DESCRIBED ABOVE IS PREDICATED UPON THE FOLOWING DESIGN ASSUMPTIONS:

1. DESIGN HEIGHT OF DRILLED SHAFT IS THE DISTANCE FROM THE SHAFT HEAD ELEVATION TO THE DREDGE LINE ELEVATION
2. PERMANENT LOAD DEFLECTIONS ARE ASSUMED TO OCCUR FOLLOWING REMOVAL OF SOIL IN FRONT OF THE TANGENT SHAFT WALLS
3. ADDITIONAL ASSUMPTIONS AND CONSTRAINTS ARE DETAILED IN THE PLANS.

DREDGE LINE ELEVATIONS:
WALL AH ELEV. 630.0
FOR DRAINAGE STRUCTURE EXCAVATION

DRILLED SHAFT LOCATION SURVEY:
THE CORRECT LOCATION OF SHAFT IS CRITICAL TO ESTABLISHING AND MAINTAINING THE STRUCTURE GEOMETRY. THE CONTRACTOR SHALL EMPLOY THE SERVICES OF A OHIO REGISTERED PROFESSIONAL SURVEYOR ("THE SURVEYOR") TO ESTABLISH, MAINTAIN AND VERIFY HORIZONTAL AND VERTICAL SHAFT GEOMETRY. THE SURVEYOR SHALL BE READILY AVAILABLE TO ESTABLISH GEOMETRIC CONTROL AND PERFORM THE SURVEYS REQUIRED BELOW.

CONTRACTOR'S INSTALLATION PLAN:
THE CONTRACTOR SHALL PROVIDE AN INSTALLATION PLAN AS REQUIRED BY ODOT C&MS SECTION 524.03. THE INSTALLATION PLAN SHALL ALSO INCLUDE:

1. CONTRACTOR'S PROPOSED METHODS TO MAINTAIN LOCATION AND ALIGNMENT OF SHAFTS
2. CONTRACTOR'S PROPOSED METHODS FOR PERFORMING THE DRILLED SHAFT LOCATION SURVEY

COSTRUCTION CONSTRAINTS:
THE CONTRACTOR IS ADVISED THAT THE PROPOSED DRILLED SHAFT INSTALLATIONS MAY REQUIRE ADVANCING SHAFTS THROUCH EXISTING PILES. ADDITIONAL INFORMATION AND NOTES REGARDING POSSIBLE CONFLICTS ARE PROVIDED IN THE PLANS.

MATERIALS:
CONCRETE AND REINFORCING STEEL FOR DRILLED SHAFTS SHALL CONFORM TO ODOT C&MS SECTION 524.02.

A SELF CONSOLIDATION CONCRETE MIX SHALL BE INCORPORATED

THE MAXIMUM COARSE AGGREGATE SIZE SHALL BE: $\frac{3}{8}$"

PERMANENT STEEL CASINGS SHALL BE ASTM A252 GRADE 3 WITH A MINIMUM YIELD STRESS OF 45 KSI. CASING SECTION LENGTHS SHALL BE MAXIMIZED TO MINIMIZE THE NUMBER OF FIELD SPLICE LOCATIONS. FIELD SPLICE LOCATIONS SHALL BE AS REQUIRED BY THE PLAN DETAILS. THE USE OF SPIRAL WELDED PIPE IS PERMITTED.

WALL GENERAL NOTES (1 OF 2)
WALL AH
ALONG NORTH SIDE OF I.R. 90 UNDER CARNEGIE AVE.

SFN N/A

DESIGN AGENCY

Michael Baker INTERNATIONAL

DESIGNER	CHECKER
GZ	SED

REVIEWER LPC 08-11-22

PROJECT ID 82382

SUBSET	TOTAL
2	11

SHEET	TOTAL
1052	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet (1 of 2) PAPERSIZE: 17x11 (in.) DATE: 8/12/2022 TIME: 2:00:34 PM USER: MBittner
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District12\82382\400-Engineering\Structures\WALL_AH\Sheets\82382_AH_WN001.dgn

ITEM 524 - DRILLED SHAFTS, MISC.: DEMONSTRATION DRILLED SHAFT

PART 1: DESCRIPTION
THIS WORK CONSISTS OF ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS TO CONSTRUCT A DEMONSTRATION DRILLED SHAFT FOR TESTING AND EVALUATION TO VERIFY THE PROPOSED CONSTRUCTION METHODS FOR THE PRODUCTION OF DRILLED SHAFTS.

PART 2: MATERIALS
THE DEMONSTRATION DRILLED SHAFT SHALL USE THE SAME CONCRETE MIX DESIGN AND STEEL REINFORCEMENT AS THE PRODUCTION DRILLED SHAFTS.

PART 3: EXECUTION
SUBMIT A DRILLED SHAFT INSTALLATION PLAN TO THE ENGINEER FOR ACCEPTANCE IN ACCORDANCE WITH THE REQUIREMENTS OF C&MS 524.03. CONSTRUCT AT LEAST ONE DEMONSTRATION DRILLED SHAFT IN THE AREA SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE ACCEPTED WRITTEN INSTALLATION. UPON CONSTRUCTION OF THE DEMONSTRATION DRILLED SHAFT, AND RECEIPT OF TESTING AND EVALUATION RESULTS CONFIRMING THE DEMONSTRATION DRILLED SHAFT HAS BEEN INSTALLED IN ACCORDANCE WITH CONTRACT DOCUMENT, THE ENGINEER WILL ISSUE A LETTER ACCEPTING THE INSTALLATION PLAN FOR THE CONSTRUCTION OF THE SUBSEQUENT PRODUCTION DRILLED SHAFTS.

IF MODIFICATION(S) TO THE INSTALLATION PLAN ARE MADE, WHETHER DUE TO THE TESTING AND EVALUATION RESULTS OR FOR OTHER REASON, THE DEPARTMENT WILL REQUIRE CONSTRUCTON OF AN ADDITIONAL DEMONSTRATION SHAFT CONSTRUCTED IN ACCORDANCE WITH THE MODIFIED INSTALLATION PLAN, AT NO ADDITIONAL COST. THE DIAMETER, LENGTH, REINFORCING, INSTALLATION METHODS, AND OTHER MISCELLANEOUS DETAILS OF THE DEMONSTRATION SHAFT SHALL BE THE SAME AS THE PRODUCTION DRILLED SHAFTS.

SUBMIT THE LOCATION OF THE DEMONSTRATION SHAFT TO THE ENGINEER FOR ACCEPTANCE. LOCATE THE DEMONSTRATION DRILLED SHAFT SUCH THAT NO INTERFERENCE OCCURS WITH THE FOUNDATIONS OF EXISTING OR PROPOSED STRUCTURES, THE PROPOSED MAINTENANCE OF TRAFFIC, OR EXISTING OR PROPOSED UTILITIES.

LOCATE THE DEMONSTRATION DRILLED SHAFT SO THAT TESTING DOES NOT DAMAGE THE JUVENILE JUSTICE CENTER BUILDING.

TEST THE DEMONSTRATION DRILLED SHAFT BY THERMAL INTEGRITY PROFILING (TIP) ACCORDING TO ASTM D7949, METHOD BE, BY CROSSHOLE SONIC LOGGING (CSL) ACCORDING TO ASTM D6760; AND BY HIGHSTRAIN DYNAMIC TESTING ACCORDING TO ASTM D4945.

PART 4: MEASUREMENT AND PAYMENT
THE DEPARTMENT WILL MEASURE DEMONSTRATION DRILLED SHAFT BY THE NUMBER OF FEET, MEASURED ALONG THE AXIS OF THE DRILLED SHAFT FROM THE REQUIRED BOTTOM ELEVATI0N OF THE SHAFT TO THE PROPOSED TOP PLAN ELEVATION.

IN ADDITION TO THE PROVISIONS OF C&MS 524.17, THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES OF DEMONSTRATION DRILLED SHAFT AFTER INSTALLATION OF THE DEMONSTRATION SHAFT AND AFTER BEING PROVIDED WITH WRITTEN TESTING AND EVALUATION RESULTS ACCEPTABLE TO THE ENGINEER.

THE CONTRACT PRICE IS FULL COMPENSATION FOR FURNISHING AND INSTALLING DRILLED SHAFTS IN ACCORDANCE WITH THE ABOVE REQUIREMENTS, INCLUDING MOBILIZATION, SITE ACCESS, AND FINAL REMOVAL OF THE SHAFT TO 36 INCHES BELOW FINAL GRADE.

THE DEPARTMENT WILL PAY FOR TESTING AND EVALUATION OF THE ACCEPTED DEMONSTRATION SHAFT SEPARATELY.

THE DEPARTMENT WILL NOT PAY FOR TESTING AND EVALUATION FOR ADDITIONAL DEMONSTRATION DRILLED SHAFTS.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS: ITEM 524 DRILLED SHAFTS, MISC.: DEMONSTRATION DRILLED SHAFT.

ITEM 524 - DRILLED SHAFTS, MISC.: THERMAL INTEGRITY PROFILER (T.I.P.) TEST

PERFORM INTEGRITY TESTING ON THE DEMONSTRATION DRILLED SHAFT AT THE REAR ABUTMENT BY THERMAL INTEGRITY PROFILING (TIP). PERFORM TIP TESTING PER ASTM D7949, "STANDARD TEST METHODS FOR THERMAL INTEGRITY PROFILING OF CONCRETE DEEP FOUNDATIONS," METHOD B, AND PER THE PROJECT SPECIAL PROVISIONS.

ITEM 524 - DRILLED SHAFTS, MISC.: CSL TESTING, 48" DIA. SHAFT

PERFORM INTEGRITY TESTING ON THE DEMONSTRATION DRILLED SHAFTS AT THE REAR ABUTMENT BY CROSSHOLE SONIC LOGGING (CSL). PERFORM CSL TESTING PER ASTM D6760, "STANDARD TEST METHOD FOR INTEGRITY TESTING OF CONCRETE DEEP FOUNDATIONS BY ULTRASONIC CROSSHOLE TESTING." AND PER THE PROJECT SPECIAL PROVISIONS.

ITEM SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION

THIS PAY ITEM IS SPECIFICALLY INTENDED FOR THE PROTECTION OF THE WALKER WEEKS BUILDING, 2351 CARNEGIE AVENUE, CLEVELAND, OH 44115.

THIS WORK IS INCLUDED AND PAID FOR WITH THE CUY-90-1696 (BRIDGE 14) PLANS. SEE BRIDGE 14 PLANS FOR DETAILED NOTES.

ITEM SPECIAL - STRUCTURES - PRECONSTRUCTION CONDITION SURVEY

THIS PAY ITEM IS SPECIFICALLY INTENDED FOR THE PROTECTION OF THE WALKER WEEKS BUILDING, 2351 CARNEGIE AVENUE, CLEVELAND, OH 44115.

THIS WORK IS INCLUDED AND PAID FOR WITH THE CUY-90-1696 (BRIDGE 14) PLANS. SEE BRIDGE 14 PLANS FOR DETAILED NOTES.

ITEM-503 UNCLASSIFIED EXCAVATION, AS PER PLAN

THIS ITEM INCLUDES ALL EXCAVATION NECESSARY TO CONSTRUCT WALL AH. THIS ALSO INCLUDES THE ADDITIONAL EXCAVATION BELOW THE TANGENT DRILLED SHAFT CAP TO COMPLETE THE INSTALLATION OF THE CUY-90-1696 (BRIDGE 14) REAR ABUTMENT DRAINAGE.

THE DEPARTMENT WILL PAY FOR THIS ITEM AT THE CONTRACT LUMP SUM PRICE FOR ITEM 503 UNCLASSIFIED EXCAVATION, AS PER PLAN.

ITEM-511 CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN

THIS WORK CONSISTS OF ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS TO CONSTRUCT THE DRILLED TANGENT SHAFT CAP AND FENCE WALL ABOVE THE CAP. REINFORCING STEEL SHALL BE INCLUDED WITH ITEM 509.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS: ITEM 511 CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN.

ITEM-511 CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN

THIS WORK CONSISTS OF ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS TO CONSTRUCT THE RETAINING WALL CAST-IN-PLACE CONCRETE FACING BELOW THE TANGENT DRILLED SHAFT CAP. REINFORCING STEEL SHALL BE INCLUDED WITH ITEM 509.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS: ITEM 511 CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN.

ITEM-511 CONCRETE, MISC.: ARCHITECTURAL TREATMENT

THIS WORK CONSISTS OF ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS TO CONSTRUCT THE ARCHITECTURAL TREATMENTS IN THE CONCRETE SURFACE OF THE RETAINING WALL.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS: ITEM 511 CONCRETE, MISC.: ARCHITECTURAL TREATMENT.

ITEM-601 PAVED GUTTER, MISC.: PAVED GUTTER

THIS WORK CONSISTS OF ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS TO CONSTRUCT THE PAVED GUTTER BEHIND THE WALL AS DETAILED IN THE PLANS.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS: ITEM 601 PAVED GUTTER, MISC.: PAVED GUTTER

ITEM 524 - DRILLED SHAFTS, MISC.: HIGH-STRAIN DYNAMIC TESTING OF DRILLED SHAFTS

PERFORM FIELD VERIFICATION OF NOMINAL AXIAL RESISTANCE TESTING ON THE DEMONSTRATION DRILLED SHAFT AT THE REAR ABUTMENT BY HIGH-STRAIN DYNAMIC TESTING. PERFORM HIGH-STRAIN DYNAMIC TESTING PER ASTM D4945, "STANDARD TEST METHOD FOR HIGH-STRAIN DYNAMIC TESTING OF DEEP FOUNDATIONS" AND PER THE PROJECT SPECIAL PROVISIONS.

ITEM 607 - VANDAL PROTECTION FENCE, 8' STRAIGHT, COATED FABRIC, AS PER PLAN:

INSTALL VANDAL PROTECTION FENCE ACCORDING TO STD. CONSTRUCTION DRAWING VPF-1-90 AND C&MS 607, EXCEPT AS MODIFIED BELOW.

POSTS, PLATES, TIE WIRES, CAULK AND ADDITIONAL VISIBLE HARDWARE SHALL BE COLOR BLACK (FEDERAL STD. 595C #17038). FENCE FABRIC SHALL BE BLACK VINYL-COATED, CHAIN LINK STYLE. MOUNT FENCING TO TOP OF RETAINING WALL WITH CAST-IN-PLACE ANCHORS.

PLAN ABBREVIATIONS:

℄ = BASELINE
B.F. = BACK FACE
BM = BENCHMARK
BOT. OR BTM. = BOTTOM
℄ = CENTERLINE
C/C = CENTER TO CENTER
C.I.P. = CAST=IN=PLACE
C.J. = CONSTRUCTION JOINT
CLR. = CLEAR
CMS = CONSTRUCTION AND MATERIAL SPECIFICATIONS
CONST. = CONSTRUCTION
DIA. = DIAMETER
DWG. = DRAWING
EB = EASTBOUND
E.F. = EACH FACE
EL. OR ELEV. = ELEVATION
EQ. = EQUAL
EX. = EXISTING
F/F = FACE TO FACE
F.F. = FRONT FACE
FT. = FOOT OR FEET
FWD. = FORWARD
IN. = INCH
JT. = JOINT
LT. = LEFT
MAX. = MAXIMUM
MIN. = MINIMUM
MISC. = MISCELLANEOUS
NB = NORTHBOUND
NO. = NUMBER
N.P.C.P.P. = NON-PERFORATED CORRUGATED PLASTIC PIPE
O/O = OUT TO OUT
P.C.P.P. = PERFORATED CORRUGATED PLASTIC PIPE
P.E.J.F. = PREFORMED EXPANSION JOINT FILLER
PSF = POUNDS PER SQUARE FOOT
SB = SOUTHBOUND
S.O. OR SER. = SERIES OF
SPA. = SPACE OR SPACES
STA. = STATION
STD. = STANDARD
STR = STRAIGHT
TBR = TO BE REMOVED
TEMP. = TEMPORARY
TYP. = TYPICAL
U.N.O. = UNLESS NOTED OTHERWISE
VAR. = VARIES
WB = WESTBOUND
WWR = WELDED WIRE REINFORCEMENT

SECTION/DETAIL/VIEW CALLOUTS

A 10 A 10

(SEE SECTION A ON SHEET 10)

A 9 SECTION NOTE

(SECTION A CUT FROM SHEET 9)

GENERAL NOTES (2 OF 2)
WALL AH
ALONG NORTH SIDE OF I.R. 90 UNDER CARNEGIE AVE.

SFN	N/A
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	GZ
CHECKER	SED
REVIEWER	LPC 08-11-22
PROJECT ID	82382
SUBSET	3
TOTAL	11
SHEET	1053
TOTAL	2338

CUY-90-16.28

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ITEM NO.	EXT.	TOTAL	UNIT	DESCRIPTION	ABUT	PIERS	SUPER	GEN	AS PER PLAN
503	21301	1	LS	UNCLASSIFIED EXCAVATION, AS PER PLAN				1	3
509	10000	26280	LB	EPOXY COATED REINFORCING STEEL				26,280	
511	44113	105	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN				105	3
511	46013	78	CY	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN				78	3
511	71200	1997	SF	CONCRETE, MISC.: ARCHITECTURAL TREATMENT				1,997	3
512	10001	105	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)				105	2
512	10101	261	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN				261	2
513	20000	378	EACH	WELDED STUD SHEAR CONNECTORS				378	
518	20000	236	SY	PREFABRICATED GEOCOMPOSITE DRAIN				236	2
518	21200	44	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC				44	
518	40000	200	FT	6" PERFORATED CORRUGATED PLASTIC PIPE				200	
518	40010	30	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS				30	
524	94801	796	FT	DRILLED SHAFTS, 42" DIAMETER, AS PER PLAN				796	2
524	94901	1632	FT	DRILLED SHAFTS, 48" DIAMETER, AS PER PLAN				1,632	2
524	95100	1	EACH	DRILLED SHAFTS, MISC.: CSL TESTING, 48" DIA. SHAFT				1	3
524	95100	1	EACH	DRILLED SHAFTS, MISC.: DEMONSTRATION DRILLED SHAFT				1	3
524	95100	1	EACH	DRILLED SHAFTS, MISC.: HIGH STRAIN DYNAMIC TESTING OF DRILLED SHAFTS				1	3
524	95100	1	EACH	DRILLED SHAFTS, MISC.: THERMAL INTEGRITY PROFILER (T.I.P.) TEST				1	3
601	40000	100	FT	PAVED GUTTER, MISC.: PAVED GUTTER				100	3
607	39911	94	FT	VANDAL PROTECTION FENCE, 8' STRAIGHT, COATED FABRIC, AS PER PLAN				94	3

ESTIMATED QUANTITIES
WALL AH
ALONG NORTH SIDE OF I.R. 90 UNDER CARNEGIE AVE.

CUY-90-16.28 (CCG3A)

SFN
—NA—

DESIGN AGENCY
Michael Baker INTERNATIONAL

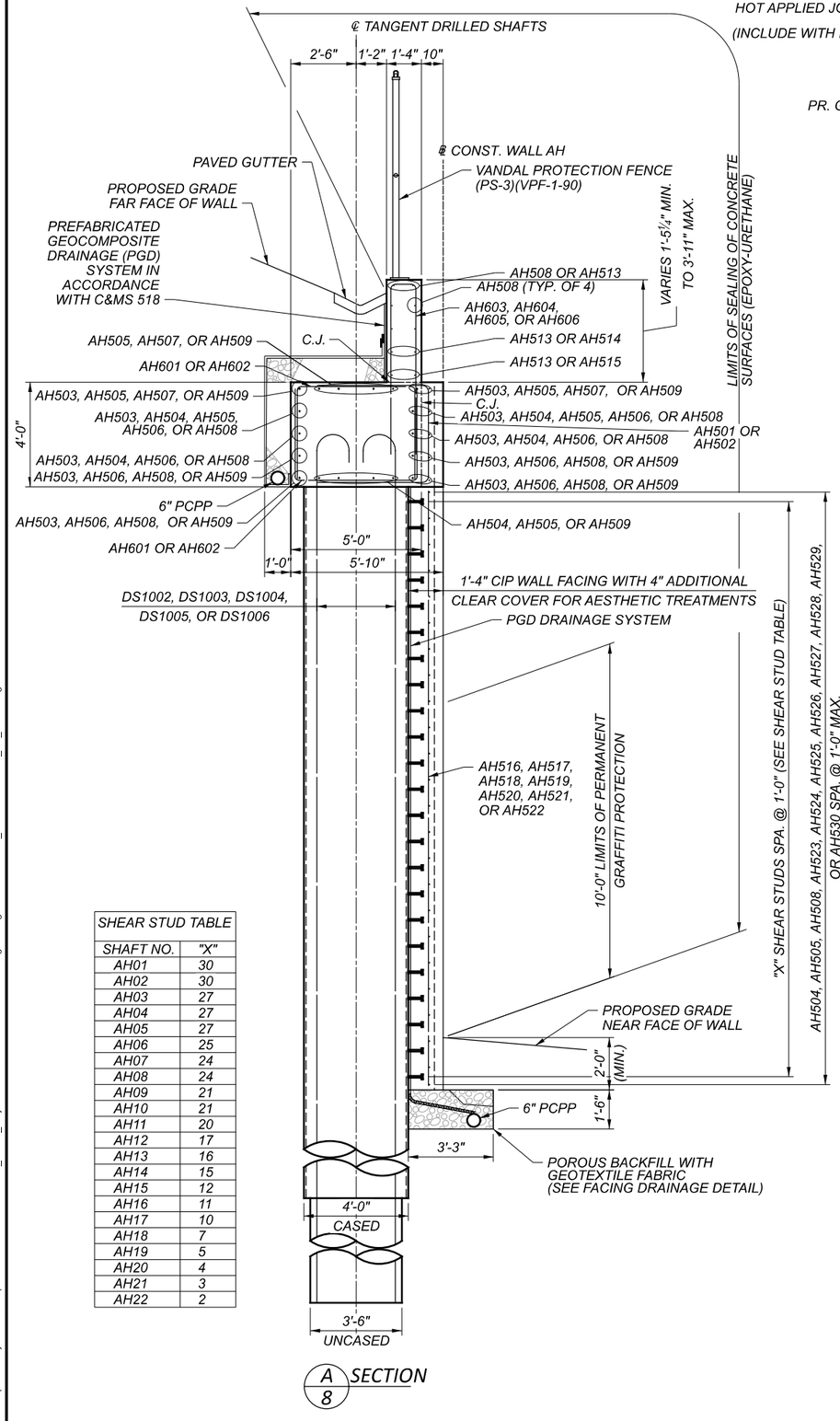
DESIGNER	CHECKER
GZ	SED

REVIEWER
LPC 08-11-22

PROJECT ID
82382

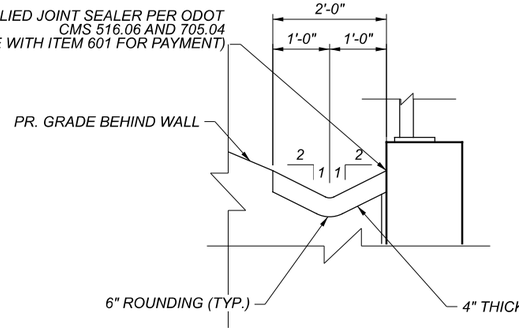
SUBSET	TOTAL
4	11

SHEET	TOTAL
1054	2338

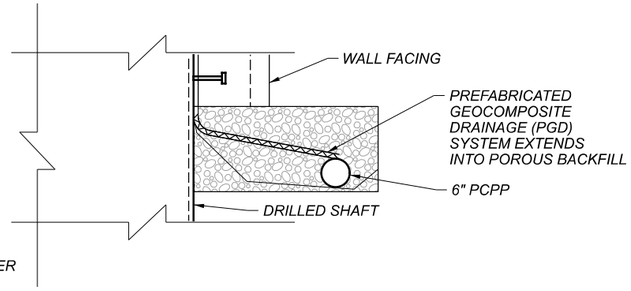


A/8 SECTION

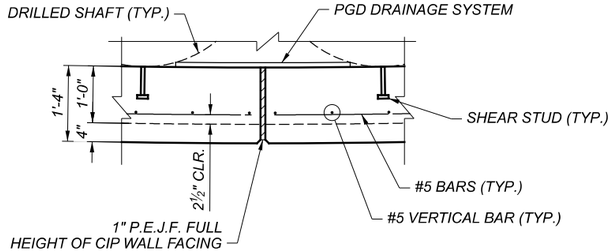
SHEAR STUD TABLE	
SHAFT NO.	"X"
AH01	30
AH02	30
AH03	27
AH04	27
AH05	27
AH06	25
AH07	24
AH08	24
AH09	21
AH10	21
AH11	20
AH12	17
AH13	16
AH14	15
AH15	12
AH16	11
AH17	10
AH18	7
AH19	5
AH20	4
AH21	3
AH22	2



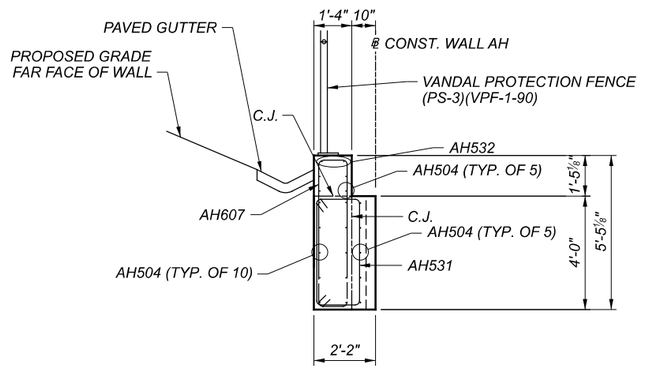
PAVED GUTTER DETAIL



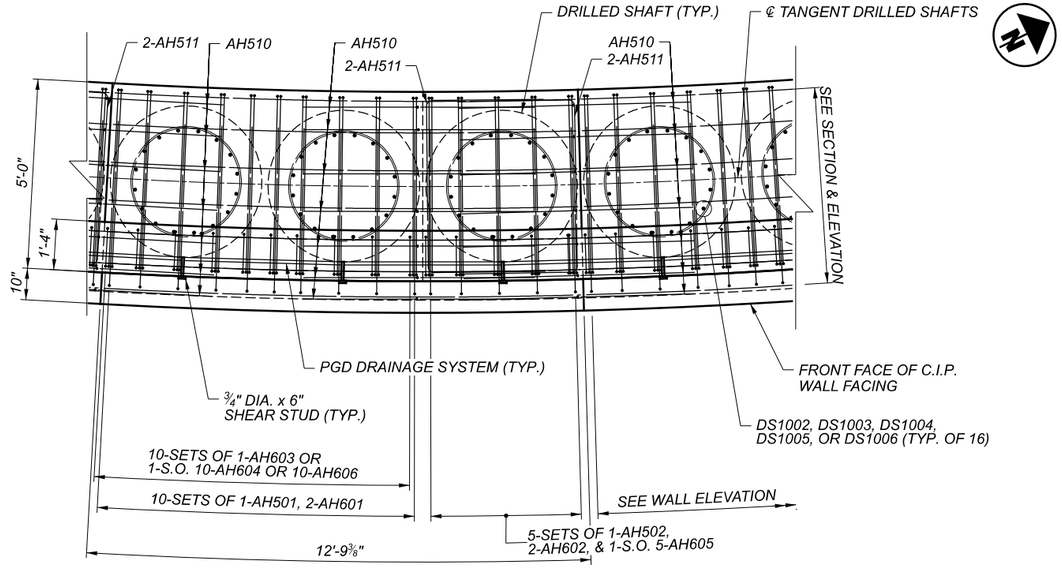
FACING DRAINAGE DETAIL



FACING CONSTRUCTION JOINT DETAIL



B/8 SECTION



TYPICAL DRILLED SHAFT PLAN

WALL TYPICAL SECTION
WALL AH
ALONG NORTH SIDE OF I.R. 90 UNDER CARNEGIE AVE.

CUY-90-16.28 (CCG3A)

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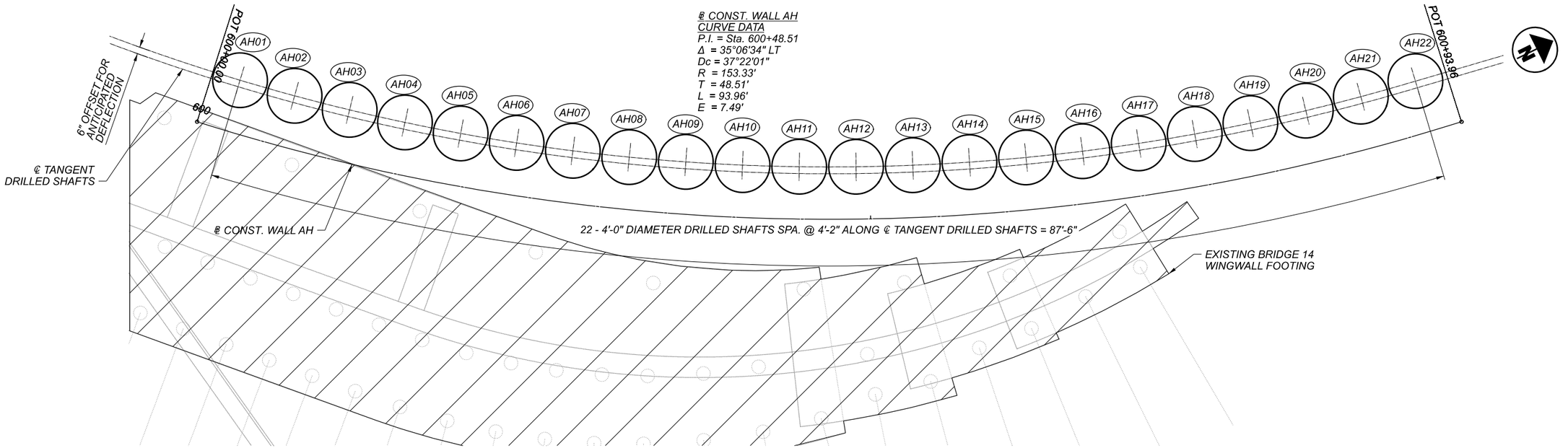
SFN	N/A
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	GZ
CHECKER	SED
REVIEWER	LPC 08-11-22
PROJECT ID	82382
SUBSET	5
TOTAL	11
SHEET	1055
TOTAL	2338



DRILLED SHAFT SCHEDULE

DESIGNATION	INITIAL NORTHING	INITIAL EASTING	DIAMETER	TOP ELEV.	TIP ELEV.	TOTAL LENGTH (FT.)	D.S. BAR MARK	NO. OF D.S. LONG. BARS	SPIRAL MARK	CASING LENGTH	CASING THICKNESS	DEFLECTED NORTHING	DEFLECTED EASTING
AH01			48"	665.57	543.00	122.6	DS1001& DS1002	16-SETS OF 4-DS1001& 1-DS1002	DS SP401& DS SP402	92.0	1.00"		
AH02			48"	665.57	543.00	122.6	DS1001& DS1002	16-SETS OF 4-DS1001& 1-DS1002	DS SP401& DS SP402	92.0	1.00"		
AH03			48"	663.73	543.00	120.7	DS1001& DS1002	16-SETS OF 4-DS1001& 1-DS1002	DS SP401& DS SP403	90.0	1.00"		
AH04			48"	663.73	543.00	120.7	DS1001& DS1002	16-SETS OF 4-DS1001& 1-DS1002	DS SP401& DS SP403	90.0	1.00"		
AH05			48"	663.73	543.00	120.7	DS1001& DS1002	16-SETS OF 4-DS1001& 1-DS1002	DS SP401& DS SP403	90.0	1.00"		
AH06			48"	661.90	543.00	118.9	DS1001& DS1003	16-SETS OF 4-DS1001& 1-DS1003	DSSP 401& DS SP404	88.0	1.00"		
AH07			48"	661.90	543.00	118.9	DS1001& DS1003	16-SETS OF 4-DS1001& 1-DS1003	DS SP401& DS SP404	88.0	1.00"		
AH08			48"	661.90	543.00	118.9	DS1001& DS1003	16-SETS OF 4-DS1001& 1-DS1003	DS SP401& DS SP404	88.0	1.00"		
AH09			48"	660.07	547.00	113.1	DS1001& DS1004	16-SETS OF 4-DS1001& 1-DS1004	DS SP401& DS SP405	83.0	1.00"		
AH10			48"	660.07	547.00	113.1	DS1001& DS1004	16-SETS OF 4-DS1001& 1-DS1004	DS SP401& DS SP405	83.0	1.00"		
AH11			48"	660.07	547.00	113.1	DS1001& DS1004	16-SETS OF 4-DS1001& 1-DS1004	DS SP401& DS SP405	83.0	1.00"		
AH12			48"	658.23	547.00	111.2	DS1001& DS1004	16-SETS OF 4-DS1001& 1-DS1004	DS SP401& DS SP406	81.0	1.00"		
AH13			48"	658.23	547.00	111.2	DS1001& DS1004	16-SETS OF 4-DS1001& 1-DS1004	DS SP401& DS SP406	81.0	1.00"		
AH14			48"	658.23	547.00	111.2	DS1001& DS1004	16-SETS OF 4-DS1001& 1-DS1004	DS SP401& DS SP406	81.0	1.00"		
AH15			48"	656.40	552.00	104.4	DS1001& DS1005	16-SETS OF 4-DS1001& 1-DS1005	DS SP401& DS SP407	64.0	1.00"		
AH16			48"	656.40	552.00	104.4	DS1001& DS1005	16-SETS OF 4-DS1001& 1-DS1005	DS SP401& DS SP407	64.0	1.00"		
AH17			48"	656.40	552.00	104.4	DS1001& DS1005	16-SETS OF 4-DS1001& 1-DS1005	DS SP401& DS SP407	64.0	1.00"		
AH18			48"	654.57	552.00	102.6	DS1001& DS1005	16-SETS OF 4-DS1001& 1-DS1005	DS SP401& DS SP408	62.0	1.00"		
AH19			48"	654.57	561.00	93.6	DS1001& DS1006	16-SETS OF 3-DS1001& 1-DS1006	DS SP401& DS SP409	42.0	1.00"		
AH20			48"	654.57	561.00	93.6	DS1001& DS1006	16-SETS OF 3-DS1001& 1-DS1006	DS SP401& DS SP409	42.0	1.00"		
AH21			48"	654.57	561.00	93.6	DS1001& DS1006	16-SETS OF 3-DS1001& 1-DS1006	DS SP401& DS SP409	42.0	1.00"		
AH22			48"	654.57	561.00	93.6	DS1001& DS1006	16-SETS OF 3-DS1001& 1-DS1006	DS SP401& DS SP409	42.0	1.00"		

LEGEND

(AH0X) INDICATES PROPOSED DRILLED SHAFT NUMBER.

NOTES

1. DRILLED SHAFTS ARE TO BE INSTALLED IN THE INITIAL POSITION INDICATED IN THE FOUNDATION PLAN. REFER TO THE GENERAL NOTES FOR DETAILS.
2. PAYMENT FOR DRILLED SHAFTS INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS SHALL BE MADE UNDER ITEM 524-DRILLED SHAFTS, 42" DIAMETER, AS PER PLAN AND ITEM 524-DRILLED SHAFTS, 48" DIAMETER, AS PER PLAN. REFER TO GENERAL NOTES.

FOUNDATION PLAN (1 OF 2)
WALL AH
ALONG NORTH SIDE OF I.R. 90 UNDER CARNEGIE AVE.

SFN —NA—

DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER	CHECKER
GZ	SED

REVIEWER LPC 08-11-22

PROJECT ID 82382

SUBSET	TOTAL
6	11

SHEET	TOTAL
1056	2338

CUY-90-16.28 (CCG3A)

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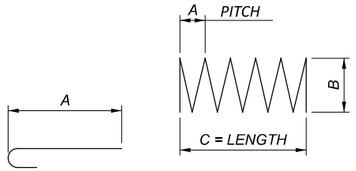
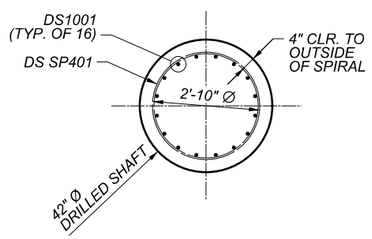
BAR MARK	LENGTH	TYPE	A	B	C
DS1001		STR.			
DS1002		16			
DS1003		16			
DS1004		16			
DS1005		16			
DS1006		16			
DS SP401		27	3"	2'-10"	
DS SP402		27	12"	2'-10"	
DS SP 403		27	12"	2'-10"	
DS SP404		27	12"	2'-10"	
DS SP405		27	12"	2'-10"	
DS SP406		27	12"	2'-10"	
DS SP407		27	12"	2'-10"	
DS SP408		27	12"	2'-10"	
DS SP409		27	12"	2'-10"	

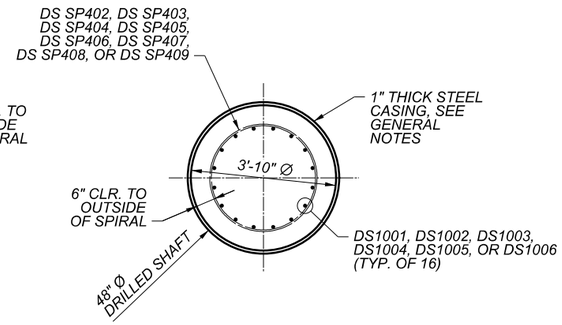


TYPE-16

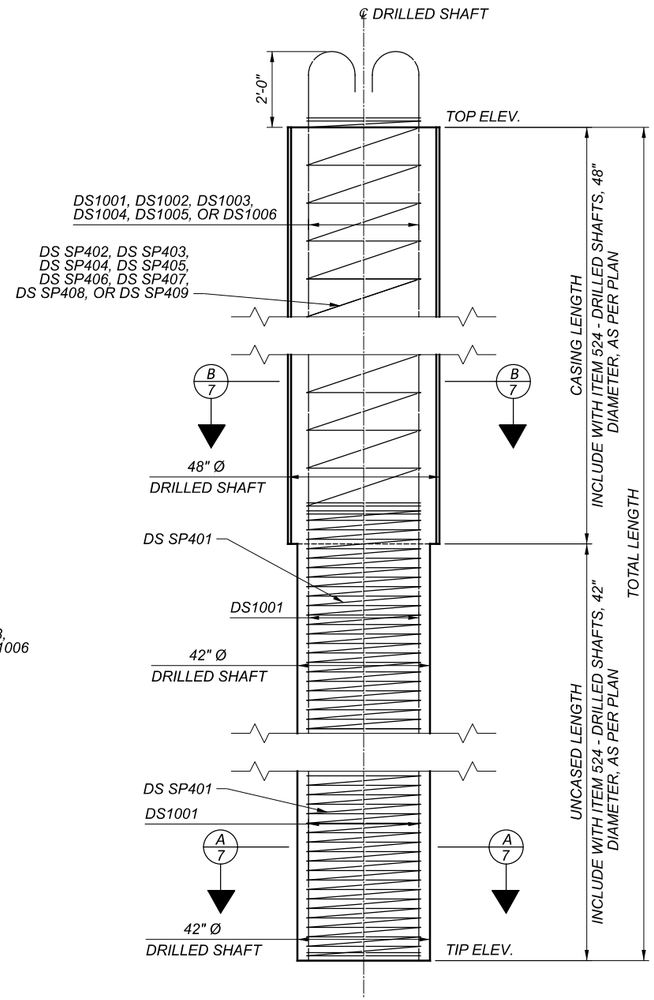
TYPE-27



A/7 SECTION



B/7 SECTION



DRILLED SHAFT ELEVATION

NOTES

1. DRILLED SHAFTS ARE TO BE INSTALLED IN THE INITIAL POSITION INDICATED IN THE FOUNDATION PLAN. REFER TO THE GENERAL NOTES FOR DETAILS.
2. PAYMENT FOR DRILLED SHAFTS INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS SHALL BE MADE UNDER ITEM 524-DRILLED SHAFTS, 42" DIAMETER, AS PER PLAN AND ITEM 524-DRILLED SHAFTS, 48" DIAMETER, AS PER PLAN. REFER TO GENERAL NOTES.

FOUNDATION PLAN (2 OF 2)
WALL AH
ALONG NORTH SIDE OF I.R. 90 UNDER CARNEGIE AVE.

SFN N/A

DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER	CHECKER
GZ	SED

REVIEWER LPC 08-11-22

PROJECT ID 82382

SUBSET	TOTAL
7	11

SHEET	TOTAL
1057	2338

CUY-90-16.28 (CCG3A)

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LIMITS OF BRIDGE 14 OVER I-90

WALL AH LIMITS = 97'-11½" (MEASURED ALONG ℄ CONST. WALL AH)

12'-9⅜" | 5 STEPS @ 12'-9⅜" = 63'-10¾" (MEASURED ALONG ℄ CONST. WALL AH) | 17'-3⅜" | 4'-0"

3-EQUAL POST SPA. 5'-0" MAX. | 17 POST SPACES @ 5'-0"

8'-0" VPF (SEE NOTE 1)

10-SETS OF 1-AH501, 2-AH601 & 1-AH603 SPA. @ 1'-0" MAX.

5-SETS OF 1-AH502, 2-AH602, & 1-AH603 SPA. @ 1'-0" MAX.

SET "A" | SET "B" | SET "A" | SET "B" | SET "A" | SET "B" | SET "A" | SET "B" | SET "A" | SET "B" | 20-SETS OF 1-AH501, 2-AH601, & 1-S.O. 20-AH606 SPA. @ 1'-0" MAX. | 5-SETS OF 1-AH531 & 1-AH607 SPA. @ 1'-0" MAX.

A 5 — B 5

TOP OF WALL

BEGIN WALL AH

EL. 671.65

1-SET OF 5-AH511

7-AH512

EL. 665.57

END CAP INVERT. EL. 665.0

6" PCPP

BRIDGE 14 REAR ABUTMENT DRAINAGE 6" PCPP

EL. 663.73

1-AH513 E.F.

7-AH505

3-AH505

1-AH508 E.F.

1-AH514 E.F.

1-AH513 E.F.

EXISTING GROUND LINE

PROPOSED GROUND LINE AT FAR FACE OF WALL

1-AH514 E.F.

1-AH513 E.F.

TIE WALL DRAINAGE INTO BRIDGE 14 REAR ABUTMENT DRAINAGE

1-AH508 E.F.

1-AH514 E.F.

1-AH513 E.F.

1-AH514 E.F.

1-AH513 E.F.

1-AH513 E.F.

1-AH514 E.F.

1-AH515 E.F.

7-AH512

1-AH532 E.F.

1-AH504 E.F.

END WALL AH

EL. 660.00

5-SETS OF 3-AH504

7-AH510

7-AH510

7-AH507

7-AH510

7-AH507

7-AH510

7-AH507

7-AH510

7-AH507

7-AH510

7-AH507

7-AH510

7-AH509

1-AH511

EL. 661.90

1-AH511 1¾" / FT.

EL. 660.07

1-AH511

EL. 658.23

1-AH511

EL. 656.40

1-AH511

1-AH511

1-SET OF 5-AH511

EL. 654.57

EL. 654.1

INVERT 654.8

OUTLET OUT OF SLOPE

END CAP INVERT EL. 654.4

3-AH503 & 4-AH505

3-AH503

3-AH503 & 4-AH504

1-AH504

1-AH523

3-AH506

3-AH506 & 4-AH505

3-AH506

3-AH506 & 4-AH505

1-AH505

3-AH506 & 4-AH505

3-AH506

3-AH508

3-AH508 & 4-AH505

1-AH505

1-AH528

1-AH529

1-AH508

3-AH504

3-AH509

⅛" / FT. MIN.

24-SETS OF 1-AH508 & 1-AH524 SPA. @ 1'-0" MAX.

C.J.

14-AH525 SPA. @ 1'-0" MAX.

1-S.O. 5-AH526 SPA. @ 1'-0" MAX.

1-S.O. 8-AH530 SPA. @ 1'-0" MAX.

C.J.

PROPOSED GROUND LINE AT NEAR FACE OF WALL

EL. 643.9

VARIES ⅛" / FT. MIN.

1-AH504

EL. 638.5

1-AH527

EL. 635.8

INVERT EL. 634.9

1-AH524

1-AH523

1-AH508

BOTTOM OF WALL FACING

6" PCPP TIE INTO BRIDGE 14 FACING DRAINAGE

DRILLED SHAFT (TYP.)

1-S.O. 18-AH522 SPA. @ 1'-0" MAX.

AH19 | AH20 | AH21 | AH22

1-S.O. 14-AH521 SPA. @ 1'-0" MAX.

34'-3⅞"

AH15 | AH16 | AH17 | AH18

1-S.O. 14-AH519 SPA. @ 1'-0" MAX.

1-S.O. 14-AH520 SPA. @ 1'-0" MAX.

25'-6¾"

1-S.O. 10-AH516 SPA. @ 1'-0" MAX.

1-S.O. 14-AH517 SPA. @ 1'-0" MAX.

1-S.O. 14-AH518 SPA. @ 1'-0" MAX.

34'-0⅞"

AH01 | AH02 | AH03 | AH04 | AH05 | AH06 | AH07 | AH08 | AH09 | AH10 | AH11 | AH12 | AH13 | AH14

A 5

ELEVATION

DEVELOPMENT LENGTHS:

#6 BAR VERTICAL = 33"

LAP LENGTHS:

#5 BAR = 37"
#6 BAR VERTICAL = 43"

SET "A" = 10-SETS OF 1-AH501, 2-AH601 & 1-S.O. 10-AH604 SPA. @ 1'-0" MAX.

SET "B" = 5-SETS OF 1-AH502, 2-AH602 & 1-S.O. 5-AH605 SPA. @ 1'-0" MAX.

LEGEND:

(#) - DENOTES DRILLED SHAFT NUMBER

NOTES:

1. SEE ODOT STANDARD DRAWING VPF-1-90 FOR FENCE DETAILS.
2. FENCE POSTS SHALL BE INSTALLED PLUMB.

WALL ELEVATION
WALL AH
ALONG NORTH SIDE OF I.R. 90 UNDER CARNEGIE AVE.

CUY-90-16.28 (CCG3A)

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SFN	—NA—
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	GZ
CHECKER	SED
REVIEWER	LPC 08-11-22
PROJECT ID	82382
SUBSET	8
TOTAL	11
SHEET	1058
TOTAL	2338

- SHEET NOT USED -

SHEET NOT USED
WALL AH
ALONG NORTH SIDE OF I.R. 90 UNDER CARNEGIE AVE.

CUY-90-16.28 (CCG3A)

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SFN
N/A

DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER	CHECKER
GZ	SED

REVIEWER
LPC 08-11-22

PROJECT ID
82382

SUBSET	TOTAL
9	11

SHEET	TOTAL
1059	2338

MODEL: Untitled Sheet PAPERSIZE: 17x11 (in.) DATE: 8/12/2022 TIME: 2:02:32 PM USER: Mbittner
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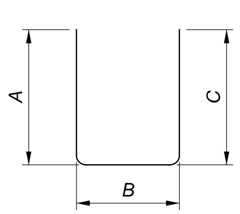
- SHEET NOT USED -

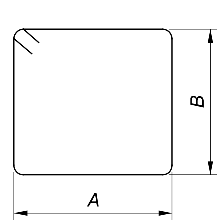
SHEET 1060 / TOTAL 2338	SUBSET 10 / TOTAL 11	PROJECT ID 82382	REVIEWER LPC 08-11-22
DESIGNER GZ	CHECKER SED	Michael Baker INTERNATIONAL	SFN N/A DESIGN AGENCY

SHEET NOT USED
WALL AH
ALONG NORTH SIDE OF I.R. 90 UNDER CARNEGIE AVE.

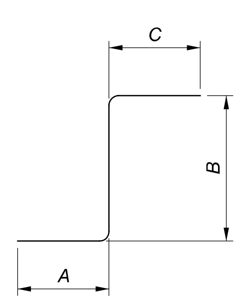
WALL AH											
MARK	NUMBER TOTAL	LENGTH	WEIGHT (LBS.)	TYPE	DIMENSIONS						SER INC.
					A	B	C	D	E	R	
		TOTAL:		LBS.							



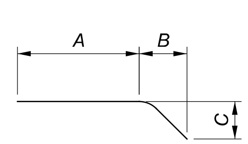
TYPE-2



TYPE-3



TYPE-8



TYPE-19

NOTES:

1. SERIES BARS - EACH BAR VARIES BY TABULATED AMOUNT.
2. ALL DIMENSIONS ARE OUT TO OUT.
3. TYPE "STR" INDICATES STRAIGHT BAR.
4. THE BAR SIZE NUMBER IS SPECIFIED IN THE "MARK" COLUMN. THE FIRST DIGIT INDICATES THE BAR SIZE NUMBER.
5. ALL BARS SHALL BE EPOXY COATED UNLESS NOTED OTHERWISE.
6. SUBTOTALS AND TOTAL WEIGHTS ARE FOR INFORMATIONAL PURPOSES ONLY. IF THE REINFORCING LIST PROVIDED IN THE PLANS IS USED, IT SHALL BE VERIFIED BY THE CONTRACTOR. ANY REVISIONS IN THE REINFORCING STEEL LIST AS SHOWN IN THE PLANS WILL NOT BE REASON FOR ADJUSTMENT IN THE BID PRICE FOR STRUCTURAL CONCRETE.
7. USE STANDARD HOOKS FOR ENDS OF BARS NOT SPECIFICALLY DIMENSIONED IN DETAILS.

REINFORCING SCHEDULE
WALL AH
ALONG NORTH SIDE OF I.R. 90 UNDER CARNEGIE AVE.

SFN N/A
DESIGN AGENCY
Michael Baker INTERNATIONAL
DESIGNER GZ CHECKER SED
REVIEWER LPC 08-11-22
PROJECT ID 82382
SUBSET 11 TOTAL 11
SHEET 1061 TOTAL 2338